

CLAIMS

1. A hydraulic system for supplying an operating oil to a predetermined load, comprising:

an oil pressure source capable of outputting a predetermined hydraulic power;

a first oil path one end of which is connected to the oil pressure source;

a hydraulic pump motor having an inlet port to which the other end of the first oil path is connected;

an inertial body connected to a rotary shaft of the hydraulic pump motor;

a second oil path one end of which is connected to an outlet port of the hydraulic pump motor;

an unloading oil path branched from the second oil path;

an on-off valve inserted in the unloading oil path;

a valve for preventing backflow of the operating oil to the unloading oil path, which is connected to the other end of the second oil path; and

a third oil path extending from the valve and connected to the load.

2. The hydraulic system according to Claim 1, further comprising a controller for controlling opening and closing of the on-off valve.

3. The hydraulic system according to Claim 1, wherein the oil pressure source is a hydraulic pump driven by a driving source.

4. The hydraulic system according to Claim 1, wherein the load comprises a plurality of loads,

wherein there are the hydraulic pump motor, the inertial body, the second oil path, the unloading oil path, the on-off valve,
5 the valve for preventing backflow, and the third oil path provided for each of the plurality of loads, and

wherein the oil pressure source comprises only one oil pressure source provided for the plurality of loads, and the first oil path is branched into oil paths as many as the loads, to be
10 connected to inlet ports of the corresponding hydraulic pump motors.